Amendments to the claims:

1. (Previously Presented) A method to write in flash type memory of an electronic module comprising:

    defining a mirror area in the flash type memory divided into at least two physical areas each designated to correspond to a same logical area for storing content written to the logical area;

    designating one of the at least two physical areas as being an active physical area; and

    during a write to said logical area, programming the content of said logical area into the active physical area.

2. (Previously Presented) The method according to claim 1, further comprising:

    erasing the content of all physical areas in a memory area in a single operation at a convenient time.

3. (Previously Presented) The method according to claim 2, wherein the convenient time is a period of inactivity or when all the physical areas are used.

4. (Previously Presented) The method according to claim 1, comprising copying the active physical area into a buffer area, erasing all physical areas and copying the buffer into a first available physical area in the mirror area.

5. (Previously Presented) The method according to claim 2 comprising performing the erasure and programming/read operations in parallel thereby not blocking the electronic module.

6. (Previously Presented) The method according to claim 5, comprising:

    performing the erasure and programming/read operations in parallel in a bi-bank memory, said bi-bank memory corresponding to the mirror memory area each bank having physical area(s), one bank being used for programming/reading while the other bank is erased,

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changing active bank when all physical areas of the bank used for programming/read have been used.

7. (Previously Presented) The method according to claim 1 comprising designating said active physical areas using a counter and incrementing the counter on each change of active area.

8. (Previously Presented) The method according to claim 1 comprising associating at least one bit with a logical area to represent the use state of at least one physical area of said logical area.

9. (Previously Presented) The method according to claim 1 wherein if the content of the logical area is identical to the content of the active physical area or when said write involves no erasure, the write is carried out in an active physical area and in a blank physical area in the mirror area otherwise.

10. (Previously Presented) The method according to claim 9, comprising programming only a portion of the logical area in the blank physical area.

11. (Currently Amended) An electronic module comprising information processing means and comprising a flash type non-volatile memory having a mirror memory formed from at least two physical areas each designated to correspond to a same logical area, each new programming operation to said logical area taking place in one of the physical areas of the mirror memory designated as an active physical area and if the new programming operation to the active physical area ~~cannot be achieved by not writing to the active physical area or by performing bit programming operations~~ requires writing a 0 into a location occupied by a 1 in the active physical area, thereby requiring erasure of the active physical area, designating a new active physical area.

12. (Currently Amended) A card comprising an electronic module having information processing means and a flash type non-volatile memory having a mirror memory formed from at least two physical areas each designated to correspond a same logical area, each new programming operation to said logical area taking place in one of the physical areas of the mirror memory

designated as an active physical area and if the new programming operation <u>requires writing a 0 into a location occupied by a 1 in the active physical area, thereby requiring erasure of</u> ~~to~~ the active physical area, designating a new active physical area.

13. (Currently Amended) A <u>non-transient</u> computer readable storage medium containing a computer program comprising program code instructions to cause a microprocessor to write in a flash type memory of an electronic module, wherein the computer program instructions comprise instructions for

defining a mirror area in the flash type memory divided into at least two physical areas, each designated to correspond to a same logical area for storing content written to the logical area,

designating one of the physical areas as being an active physical area, and

during a write in said logical area, programming the content of said logical area in the active physical area.

14. (Previously Presented) The method according to claim 5, comprising designating said active physical areas using a counter and incrementing the counter on each change of active area.

15. (Previously Presented) The method according to claim 6, comprising designating said active physical areas using a counter and incrementing the counter on each change of active area.

16. (Previously Presented) The method according to claim 5, comprising associating at least one bit with a logical area to represent the use state of at least one physical area of said logical area.

17. (Previously Presented) The method according to claim 6, comprising associating at least one bit with a logical area to represent the use state of at least one physical area of said logical area.

18. (Previously Presented) The method according to claim 7, comprising associating at least one bit with a logical area to represent the use state of at least one physical area of said logical area.

19. (Previously Presented) The method according to claim 5, wherein if the content of the logical area is identical to the content of the active physical area or when said write involves no erasure, the write is carried out in an active physical area and in a blank physical area otherwise.

20. (Previously Presented) The method according to claim 6, wherein if the content of the logical area is identical to the content of the active physical area or when said write involves no erasure, the write is carried out in an active physical area and in a blank physical area otherwise.

21. (Previously Presented) The method according to claim 7, wherein if the content of the logical area is identical to the content of the active physical area or when said write involves no erasure, the write is carried out in an active physical area and in a blank physical area otherwise.

22. (Previously Presented) The method according to claim 21, comprising programming only a portion of the logical area in the blank physical area.

23. (Previously Presented) The computer readable storage medium of claim 13, wherein the computer program instructions further comprise instructions to erase the content of all physical areas in a memory area in a single operation at a convenient time.

24. (CANCEL)

25. (Previously Presented) The computer readable storage medium of claim 13 wherein the computer program instructions further comprise instructions to copy the active physical area into a buffer area, erasing all physical areas, and copying the buffer into a first available physical area in the mirror area.

26. (Previously Presented) The computer readable storage medium of claim 23 wherein the computer program instructions further comprise instructions to

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perform the erasure and programming/read operations in parallel without blocking the electronic module.

27. (Previously Presented) The computer readable storage medium of claim 26, wherein the computer program instructions further comprise instructions to perform the erasure and programming/read operations in parallel in a bi-bank memory, said bi-bank memory corresponding to the mirror memory each bank having physical area(s), one bank being used for programming/reading while the other bank is erased, the method changing active bank when all physical areas of the bank used for programming/read have been used.

28. (Previously Presented) The computer readable storage medium of claim 13 wherein the computer program instructions further comprise instructions to designate said active physical areas using a counter incremented on each change of active area.

29. (Previously Presented) The computer readable storage medium of claim 13 or 23 wherein the computer program instructions further comprise instructions to associate at least one bit with a logical area representing the use state of at least one physical area of said logical area.

30. (Previously Presented) The computer readable storage medium of claim 13 wherein the computer program instructions further comprise instructions wherein the write is carried out in an active physical area if the content of the logical area is identical to the content of the active physical area or when said write involves no erasure, otherwise in a blank physical area in the mirror area that becomes the active physical area.

31. (Previously Presented) The computer readable storage medium of claim 30 wherein the computer program instructions further comprise instructions to program only part of the logical area in the blank physical area.

32. (Previously Presented) The method of claim 1, wherein each physical area has a status which is one of three statuses: blank, active and used.

33. (Previously Presented) The method of claim 32, wherein:

the blank status corresponds to one of the physical areas ready to receive data but not selected for receiving data,

the active status corresponds to one of the physical areas ready to receive data and selected for receiving data or to one of the physical areas containing the actual content of the logical area to be read,

the used status corresponds to one of the physical areas containing an outdated data that shall not be read, said physical area waiting for an erasure.

34. (Previously Presented) The electronic module of claim 11, wherein each physical area has a status, which is one of three statuses: blank, active and used.

35. (Previously Presented) The electronic module of claim 34 wherein:

the blank status corresponds to one of the physical areas ready to receive data but not selected for receiving data,

the active status corresponds to one of the physical areas ready to receive data and selected for receiving data or to one of the physical areas containing the actual content of the logical area to be read,

the used status corresponds to one of the physical areas containing an outdated data that shall not be read, said physical area waiting for erasure.

36. (Previously Presented) The card of claim 12 wherein each physical area has a status which is one of three statuses: blank, active and used.

37. (Previously Presented) The card of claim 36 wherein:

the blank status corresponds to one of the physical areas ready to receive data but not selected for receiving data,

the active status corresponds to one of the physical areas ready to receive data and selected for receiving data or to one of the physical areas containing the actual content of the logical area to be read,

the used status corresponds to one of the physical areas containing an outdated data that shall not be read, said physical area waiting for erasure.

38. (Previously Presented) The computer readable storage medium of claim 13, wherein each physical area has a status which is one of three statuses: blank, active and used.

39. (Previously Presented) The computer readable storage medium of claim 38 wherein:

the blank status corresponds to one of the physical areas ready to receive data but not selected for receiving data,

the active status corresponds to one of the physical areas ready to receive data and selected for receiving data or to one of the physical areas containing the actual content of the logical area to be read,

the used status corresponds to one of the physical areas containing an outdated data that shall not be read, said physical area waiting for erasure.

40. (Currently Amended) The method of claim 1 wherein the method further comprises:

determining whether a writing operation to the active physical area cannot ~~can~~ be achieved by ~~not writing to the active physical area or by~~ performing bit programming operations because the writing operation requires writing a 0 into a location occupied by a 1 in the active physical area;

in response to determining that the writing operation to the active physical area ~~cannot be achieved by not writing to the active physical area or by performing bit programming operations,~~ requires writing a 0 into a location occupied by a 1 in the

physical area, designating an unwritten physical area in the mirror area as the active physical area; and

storing an indication that the active physical area is a written memory area.

41. (Currently Amended) The computer readable storage medium of claim 13 wherein the computer program instructions further comprise instructions to

determine whether a writing operation to the active physical area cannot be achieved by ~~not writing to the active physical area or by~~ performing bit programming operations because the writing operation requires writing a 0 into a location occupied by a 1 in the active physical area;

in response to determining that the writing operation to the active physical area cannot be achieved by ~~not writing to the active physical area or by~~ performing bit programming operations, designating a new physical area in the mirror area as the active physical area; and

store an indication that the active physical area is a written memory area.